

SEQUENCE LISTING

<110> MERCK-SANTE
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)

<120> Insulin-induced gene as therapeutic target in diabetes

<130> BFF 03P0004

<160> 8

<170> PatentIn version 3.1

<210> 1

<211> 1062

<212> DNA

<213> Rattus sp.

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<211> 353

<212> PRT

<213> Rattus sp.

<400> 2

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Gly Leu Phe Asp Ser Phe Ser Leu Ile Arg Val Asp Cys Ser Ser Leu
35 40 45

Gly Pro His Ile Val Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu
50 55 60

Asp Leu Ser Ser Asn Arg Leu Glu Thr Val Asn Glu Ser Val Leu Gly
65 70 75 80

Gly Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu
85 90 95

Leu Thr Ser Ile Thr Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu
100 105 110

Ser Leu Asp Leu Ser His Asn Gly Leu Ala Ala Leu Pro Ala Glu Val
115 120 125

Phe Thr Ser Ser Pro Leu Ser Asp Ile Asn Leu Ser His Asn Arg Leu
130 135 140

Arg Glu Val Ser Ile Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala
145 150 155 160

Leu His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Leu Pro Tyr
165 170 175
Pro Ala Arg Ala Ser Leu Ser Ala Pro Thr Ile Gln Ser Leu Asn Leu
180 185 190

Ser Trp Asn Arg Leu Arg Ala Val Pro Asp Leu Arg Asp Leu Pro Leu
195 200 205

Arg Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Thr Ile Asn Pro Gly
210 215 220

Ala Phe Met Gly Leu Ala Gly Leu Thr His Leu Ser Leu Ala Ser Leu
225 230 235 240

Gln Gly Ile Leu Gln Leu Pro Pro His Gly Phe Arg Glu Leu Pro Gly
245 250 255

Leu Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Lys Trp Ala Gly
260 265 270

Ala Glu Val Phe Ser Gly Leu Gly Leu Leu Gln Glu Leu Asp Leu Ser
275 280 285

Gly Ser Ser Leu Val Pro Leu Pro Glu Thr Leu Leu His His Leu Pro
290 295 300

Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Gln Cys Arg Arg Leu
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Val Arg Glu Gly Ala Val His Arg Gln Pro Gly Ser Ser Pro Lys Val
325 330 335

Val Leu His Cys Gly Asp Thr Gln Glu Ser Ala Arg Gly Pro Asp Ile
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Leu

<210> 3

<211> 2557

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (14)..(1075)

<223>

<400> 3

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Gly Ala Gln Thr Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val	
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gag acc ttc ggc ctt ttc gac agc ttc agc ctg act cgg gtg gat tgt	145
Glu Thr Phe Gly Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys	
30 35 40	
agc ggc ctg ggc ccc cac atc atg cgg gtg ccc atc cct ctg gac aca	193
Ser Gly Leu Gly Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr	
45 50 55 60	
gcc cac ttg gac ctg tcc aac cgg ctg gag atg gtg aat gag tcg	241
Ala His Leu Asp Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser	
65 70 75	
gtg ttg gcg ggg ccg ggc tac acg acg ttg gct ggc ctg gat ctc agc	289
Val Leu Ala Gly Pro Gly Tyr Thr Leu Ala Gly Leu Asp Leu Ser	
80 85 90	
cac aac ctg ctc acc agc atc tca ccc act gcc ttc tcc cgc ctt cgc	337
His Asn Leu Leu Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg	
95 100 105	
tac ctg gag tcg ctt gac ctc agc cac aat ggc ctg rca gcc ctg cca	385
Tyr Leu Glu Ser Leu Asp Leu Ser His Asn Gly Leu Xaa Ala Leu Pro	
110 115 120	
gcc gag agc ttc acc agc tca ccc ctg agc gac gtg aac ctt agc cac	433
Ala Glu Ser Phe Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His	
125 130 135 140	
aac cag ctc cgg gag gtc tca gtg tct gcc ttc acg acg cac agt cag	481
Asn Gln Leu Arg Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln	
145 150 155	
ggc cgg gca cta cac gtg gac ctc tcc cac aac ctc att cac cgc ctc	529
Gly Arg Ala Leu His Val Asp Leu Ser His Asn Leu Ile His Arg Leu	
160 165 170	
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Val Pro His Pro Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser	
175 180 185	
ctg aac ctg gcc tgg aac cgg ctc cat gcc gtg ccc aac ctc cga gac	625
Leu Asn Leu Ala Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp	
190 195 200	
ttg ccc ctg cgc tac ctg agc ctg gat ggg aac cct cta gct gtc att	673
Leu Pro Leu Arg Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile	
205 210 215 220	
ggt ccg ggt gcc ttc gcg ggg ctg gga ggc ctt aca cac ctg tct ctg	721
Gly Pro Gly Ala Phe Ala Gly Leu Gly Leu Thr His Leu Ser Leu	
225 230 235	
gcc agc ctg cag agg ctc cct gag ctg gcg ccc agt ggc ttc cgt gag	769
Ala Ser Leu Gln Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu	
240 245 250	

cta ccg ggc ctg cag gtc ctg gac ctg tcg ggc aac ccc aag ctt aac 817
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 255 260 265

tgg gca gga gct gag gtg ttt tca ggc ctg agc tcc ctg cag gag ctg 865
 Trp Ala Gly Ala Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu
 270 275 280

gac ctt tcg ggc acc aac ctg gtg ccc ctg cct gag gcg ctg ctc ctc 913
 Asp Leu Ser Gly Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu
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cac ctc ccg gca ctg cag agc gtc agc gtg ggc cag gat gtg cgg tgc 961
 His Leu Pro Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys
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cg^g ccg ctg gtg cg^g gag gg^c acc tac ccc cg^g agg cct gg^c tcc agc 1009
 Arg Arg Leu Val Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser
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ccc aag gtg gcc ctg cac tgc gta gac acc cg^g gaa tct gct gcc agg 1057
 Pro Lys Val Ala Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg
 335 340 345

ggc ccc acc atc ttg tga caaaatggtgt ggcccaggc cacataacag 1105
 Gly Pro Thr Ile Leu
 350

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<210> 4

<211> 353

<212> PRT

<213> Homo sapiens

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<221> misc_feature

<222> (121)..(121)

<223> 'Xaa' in position 121 represents Ala or Thr.

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Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val Glu Thr Phe Gly
20 25 30

Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys Ser Gly Leu Gly
35 40 45

Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu Asp
50 55 60

Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser Val Leu Ala Gly
65 70 75 80

Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu
85 90 95

Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser
100 105 110

Leu Asp Leu Ser His Asn Gly Leu Xaa Ala Leu Pro Ala Glu Ser Phe
115 120 125

Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg
130 135 140

Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala Leu
145 150 155 160

His Val Asp Leu Ser His Asn Ile His Arg Leu Val Pro His Pro
165 170 175

Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala
180 185 190

Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg
195 200 205

Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile Gly Pro Gly Ala
210 215 220

Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu Ala Ser Leu Gln
225 230 235 240

Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu Leu Pro Gly Leu
245 250 255

Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn Trp Ala Gly Ala
260 265 270

Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu Asp Leu Ser Gly
275 280 285

Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu His Leu Pro Ala
290 295 300

Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys Arg Arg Leu Val
305 310 315 320

Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser Pro Lys Val Ala
325 330 335

Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg Gly Pro Thr Ile
340 345 350

Leu

<210> 5

<211> 25

<212> DNA

<213> Artificial : primer

<400> 5

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25

<210> 6

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<212> DNA

<213> Artificial : primer

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31

<210> 7

<211> 22

<212> DNA

<213> Artificial : primer

<400> 7

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22

<210> 8

<211> 29

<212> DNA

<213> Artificial : primer

<400> 8

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29

1